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ABSTRACT

Despite its reputation for being a scientific and precise tool for measurement, psychological testing is a culturally biased procedure that results in discrimination against minority groups, particularly against minority students. Academic achievement and intelligence tests, the two types of tests most frequently used in public schools, assume that all people have the same kinds of experiences which are tapped by the questions on the tests. They also presume that there is uniformity of school curricula in this country, and that all who take the tests have the same facility with the English language. This cultural bias is compounded by other factors such as the item selection process, the content of the items, and the responses considered acceptable to those items. Because of the data obtained on these tests, a disproportionate number of minority students in California are tracked into classes for the slow learner or mentally retarded, while a very small proportion are in classes for the gifted. Examination of the historical data concerning the social and political implications of such tests, and of the present day uses of these tests in the public schools, will demonstrate the influence their use has had on the lives of minority students. (Author/WP)

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CULTURAL BIAS IN PSYCHOLOGICAL TESTING

Harold E. Dent, Ph.D.

Psychological testing has almost become an institution in this country. In general, psychological testing is viewed as a highly sophisticated, precise, scientific procedure for assessing specific aspects of human functioning. The test industry and many psychologists continue to try to convince the public that the use of standard psychological tests is the most efficient, accurate and objective means of acquiring information about large numbers of people in the most economical fashion. What the public is seldom told is that there are some definite problems associated with the use of psychological tests in the evaluation of the minority populations in this country. This refers specifically to the disadvantages that accrue when the results of testing are allowed to influence the education and subsequently the total lives of Black and other minority children. It is important that the school community be aware of these problems as they go about the task of reviewing and evaluating educational services and reviewing reports of the testing that is conducted in their schools. In this paper some of the most serious problems associated with the application of those tests used most often in the assessment of Black and Chicano children in public schools in California will be discussed.

The two types of tests most frequently used in public schools are the standard tests of academic achievement and the standard tests of Intelligence. Academic achievement tests were designed to be administered to large groups, whereas the intelligence (or IQ) tests were designed to be administered to groups or individuals. Group intelligence tests are sometimes referred to as tests of scholastic ability. The most common usage of the term "IQ test" refers to the individually administered standard test of intelligence.

In recent years members of minority communities have raised strong objections

to the use of standard tests of intelligence and academic achievement in the assessment of Black and Chicano students. In spite of these objections there is still a heavy reliance on tests and test scores in educational programs. The objections raised by the minority community are based on the realization that these tests are culturally biased and systematically underestimate the skills and functioning of minority students. The test industry and other advocates for maintaining the status quo of testing do not respond directly to these criticisms. They attribute the problems associated with testing to the misuse of tests. But Green (1972), DeAvilla (1973) and many others have pointed out that the tests themselves can not be ignored as a source of cultural bias. Green (1972) concluded his report on the Racial and Ethnic Bias in Test Construction by stating, "...it is no longer adequate for those who build tests to argue that bias is largely a matter of misuse..." (p. 14). DeAvilla (1973) in a report to the Civil Rights Commission also stated the issue clearly:

> "The major thesis has been that test publishers and the users of standarized IQ and summary-score achievement tests have failed to consider the problems associated with testing the minority child. And since the results of these tests are used to determine the educational and, by extension, the economic and social future of school-aged children, it behooves test publishers and the educational community to take a harder look at the structure and theory behind tests." (p. 5).

A brief discussion of the theory and procedures employed in test construction should help the reader understand the basis for the claim that the standard tests of achievement and intelligence are culturally biased. To begin with, there are some basic assumptions that are made about people upon which tests are predicated. One assumption is that there is a commonality of experience shared by all those who take the tests. Stated differently, it is assumed that all people have the same kind of experiences which are tapped by the questions on the tests. This assumption ignores the reality that there are

distinctly different arrays of cultural and social experiences that each ethnic group in this country enjoys and/or are subjected to by virtue of their ethnicity. This assumption also ignores the fact that all children have not had equal or even comparable educational opportunities.

A second assumption is that there is uniformity of the curriculum in schools throughout the country. It is common knowledge that this is not the case. The curriculum content for a Social Studies course in Berkeley, California is probably completely different from a Social Studies course for the same grade level in Atlanta, Georgia. But, if the Atlanta and Berkeley schools use the same achievement test the items on the Social Studies section of the test will be the same for both groups of students. Even within a single school district, classes in most subject areas are not the same, students are not covering the same material.

A third assumption is that all those who take the tests have the same facility with the English language, that is they speak, read or understand the language to the same degree. In other words it is assumed that a third grade child from a bilingual background will necessarily have the same degree of skill in reading and comprehension required to understand a test item written in English as a monolingual child who hears only standard English spoken at home. Thus, it should be evident that the assumptions on which tests are constructed represent a definite source of bias when tests are applied to populations other than the populations on whom and for whom they were developed.

Looking further into the process of test construction it is evident that the cultural bias already described is compounded by several other factors, the item selection process, the content of the items and the responses considered acceptable to those items. The process and procedures for construction of the standard achievement and intelligence tests have not changed over the years.

They are essentially the same now as they were when the original instruments were developed. The process is one in which experts, whose orientation is unquestionably white middle class, compose a large pool of individual items. These items are then tried out on representative samples from the population. The largest segment of that sample will naturally represent the white middle class. Consequently, the items selected for a complete test will be items that are most influenced by the responses of this majority group. In his report entitled, "Racial and Ethnic Bias in Test Construction", Green (1972), pointed out that, "Just as the degree of minority representation in standardization samples can have only a small influence on norms, minority group presence in the tryout samples dominated by some solid majority will not accomplish much." (p. 14). In other words the responses of the dominant white middle class segment of the tryout samples determines which items are finally selected. Once the items are selected and compiled into a complete test, the group standards or "norms" are established by administering the test to an even larger sample of subjects. This standardization population is again representative of the total population. Thus, the norms and the acceptable responses are determined by the largest segment of the population represented in the standardization population, the white middle class. Recognizing that small numbers of minorities in the standardization populations do not influence the resulting norms (Green 1972), many test makers don't include minorities in these samples. One of the most widely used IQ test, the Peabody Picture Vocabulary Test, was standarized on a population of Forty-two hundred white children in Nashville, Tennessee. Examination of the content of these items will reveal that it reflects the white middle class experience that the tryout samples and the standardization populations are familiar with. Items reflecting the cultural experiences of Blacks, Chicanos, Puerto Ricans, Native Americans, Asians, etc. are not found in standard tests. To ask minority children to provide specific answers to questions that describe

situations they have had no opportunity to experience, or to confront them with questions that reflect a foreign set of values is to put these children at a definite disadvantage. Is it reasonable to ask a child reared in a ghetto, How would he find his was out of a forest? Is it reasonable to expect that merely translating questions such as, Who wrote Macbeth?, into Spanish will make the item more meaningful. Is it fair to ask a Native American child, Who discovered America, and expect that child to say Christopher Columbus., Should a child from a welfare family be expected to give the middle class response to the question, Why is it better to pay bills by check than with cash? Should children whose experiences do not conform to those of the dominant white middle class be penalized for not responding in an acceptable, scoreable manner? Unfortunately for minority students, it is assumed that because they do not respond as Whites do, their intellectual abilities are impaired. This is precisely what happens when these instruments are used to evaluate minority children.

While today's victims of culturally biased IQ tests are predominantly Black and Chicano, the earliest victims included just about every minority group that immigrated to this country after the turn of the century. The original intelligence test was developed around 1910 in France by Dr. Alfred Binet to identify children with learning disabilities in order to separate them from those children who were benefiting most from the regular school program. Professors Lewis Terman of Stanford University and Henry Goddard of Princeton University were instrumental in the importation, translation and early application of the Binet IQ test (now known as the Stanford-Binet Intelligence Scale) in this country. Like most other translations, something was lost. In this instance it was the purpose. As they were used in this country the IQ test was supposed to measure one's native or inborn intelligence.

Interestingly the pattern of usage and the outcome of the use of IQ tests has not changed over the years as far as minorities are concerned. One of the early applications of IQ tests was to provide scientific evidence in support of the elitist and racist notions of that era, namely the social and racial inferiority of Indians, Chicanos, and Blacks. In his first book describing the Stanford-Binet Intelligence Test, Professor Terman (1916) stated, "...dullness seems to be racial or inherent in the family stocks from which they come. The fact that one meets this type with such extraordinary frequency among Indians, Mexicans and Negroes suggests quite forcibly the whole question of racial difference in mental traits..." Professor Terman went on to state differences in intelligence, "...cannot be wiped out by any scheme of mental culture. Children of this group should be segregated in special classes. They cannot master abstraction, but they can often be made efficient workers."

Along about the same time, as Professor Terman was engaged in his efforts, Professor Henry Goddard was applying this new scientific instrument, the intelligence test, to hundreds of European immigrants entering the United States. He discovered an amazingly high proportion of feeblemindedness among these immigrants. He reportedly found that 87 percent of the Russians, 83 percent of the Jews, 80 percent of the Hungarians, and 79 percent of the Italians entering this country were feebleminded. He proudly reported that the number of aliens deported because of feeblemindedness increased significantly in 1913 and 1914 as a direct influence of the evidence obtained from the application of the new scientific method of intelligence testing (Kamin, 1974).

One of the mose widely reported studies which clearly confirms the cultural bias of IQ tests is one in which large groups of immigrants to this country were tested and found that those who had been in this country 0 to 5 years had IQ's lower than immigrants who were in this country from 5 to 10 years. Immigrants

here between 10 to 15 years scored still higher, and those here 15 to 20 years scored even higher. Immigrants to this country 20 to 25 years were found to have average IQ's (Brigham 1923). In other words, the longer an immigrant had been in this country the higher was the score obtained on an IQ test. Yet psychologists at that time believed, and many still cling to the notion, that intelligence tests measure native intelligence.[1] The cultural bias in IQ tests can be seen in still another study based on data gathered during World War I when thousands of men were tested by the Army. The results of that massive screening revealed that in general the Black draftees scored significantly lower than White draftees. It further revealed that Blacks from the Northern States scored higher than Whites from the Southern States, but Whites from the North obtained higher than Blacks from the North. It is clear from this evidence that the closer a minority group comes to approximating the White middle class standard, on which IQ tests are based, the higher will be the scores obtained by that group on standard IQ tests.

It should be evident from this discussion how the cultural bias is built into academic achievement and intelligence tests by virtue of the construction process and the content of the items. This discussion has briefly touched on some of the rarely reported historical data concerning the social and political implications of the use of IQ tests. Examination of the present day uses of these tests in the public schools will demonstrate the specific influence their use has on the lives of minority students. Most school districts are either mandated by the state or required by their local board to use some standard test of academic achievement or scholastic aptitude as a means of determining student progress. In California and many other states the legislature requires that tests results serve as a basis for determining budget allocations to districts. Local districts require them in the belief that the information obtained is a valid indication of the effectiveness of the educational program. This claim is

reasonably accurate in reference to data obtained on children from white middle class families. But as has been pointed out earlier, the data obtained on minority students are highly questionable. In light of this, some school districts having large minority student populations such as New York and Philadelphia have voluntarily limited or eliminated the use of standard achievement tests. Others such as Washington D.C. have been forced by court action (Hobson v. Hansen, (1967)) to discontinue such testing because of the "tracking" systems that achievement testing facilitates. Tracking or ability grouping is a means of classifying and sorting students on the basis of their performance on standard achievement test. Students who obtain high scores are assumed to possess greater ability than those who score low. It should not be difficult to understand why Black and Chicano students are over represented in the low ability groups. The following quote from a recent report of U. S. Commission on Civil Rights (1974) sums up the evidence of the effects of ability grouping; "...research on the actual effects of ability grouping does not support the assertion that it has positive academic effects"..."Ability grouping as practiced produces conflicting evidence of usefulness in promoting improved scholastic achievement in superior groups, and almost uniformly unfavorable evidence for promoting scholastic achievement in average or low-achieving groups." (p. 24).

Unfortunately, there is still another area in which the minority child is being victimized by testing pratices, and that is in the assessment and subsequent placement in special classes for the educable mentally retarded (EMR) and the mentally gifted (MGM). Unlike ability grouping and grade retention, which theoretically hold out the hope that the students will "catch up" with their peers, students in a EMR class are told, in effect, that they cannot compete in a regular classroom environment and consequently become locked in special education classes. Although only a small proportion of all students are in EMR

classes, Chicano and Black children are much more likely to be placed in special education classes than Anglos. In California Chicano students comprise 16 percent of the total student populations and Blacks comprise 9 percent. The latest available statistics reveal that 23 percent of the students in EMR classes are Chicano and 25 percent are Black. The opposite situation exists in the classes for the mentally gifted. Minority students are denied admission to these classes because, as has been previously discussed, the individual IQ tests they are required to take systematically underestimates their functioning and abilities. Black and Chicano students make up less than 3 percent of the population of MMM classes while they constitute 25 percent of the total student population is the State of California.

School communities should be aware that in addition to the fact some large school districts have discontinued the use of standard tests of academic achievement, some professional organizations have joined minority communities in calling for a moratorium on the use of the culturally biased standard IQ tests (until more relevant culturally specific instruments have been developed). The professional organizations taking this position are: The Chicano Psychologists' Caucus, the National Association of Black Psychologists, the National Assembly of Parent Teacher Associations and the National Education Assocaition.

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[1] It has been reported that in subsequent years Dr. Brigham reversed his position that IQ reflected innate racial differences (J. Helmick, personal communication August 1, 1974). Nevertheless, the irreparable damage that publication of the original viewpoint in inflated on countless thousands of people was not and could not be ameliorated by the recognition that one's previously held beliefs were ill founded.

BIBLIOGRAPHY

1. Brigham, C.C. A Study of American Intelligence. Princeton, Princeton University Press, 1923.

2. DeAvilla, E.A. Some Critical Notes on Using IQ Tests for Minority Children, in Toward Quality Education for Mexican Americans. Report VI of the U. S. Commission on Civil Rights, Feb. 1974.

3. Green, D.R. Racial and Ethnic Bias In Test Construction, Final Report of the U. S. Office of Education Contract No. OEC 9-70-0058 (057) 1972.

4. Hobson v. Hansen 269 F, Supp 401 1967.

5. Kamin, L.J. The Science and Politics of I.Q., Potomac, Lawrence Erlbaum Associates, 1974.

6. Terman, L.M. The Measurement of Intelligence. Boston, Haughton-Mifflin, 1916.